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SUMM . . . invention relates to a novel compound possessing both antibacterial and comedolytic activity and to compositions thereof for the treatment of **acne**.

SUMM **Acne** is a disease of the pilosebaceous units of the skin and is characterized by the formation of comedones (whiteheads and blackheads); inflamatory papules; pustules and in more severe cases, inflammatory granulomas (cysts) and hypertrophic scars. **Topical** treatments for **acne** are mainly aimed at reducing the number of comedones and the intensity of inflammation. There are three known factors which are important in the pathogenesis of **acne**: (1) hyperactive sebaceous gland, (2) obstruction to the pilosebaceous apparatus by excessive keratinization of the follicula epithelial, and (3) initiation. . .

SUMM Various treatments of **acne** are primarily focused on the three aforementioned factors. The suppression of sebaceous gland activity or sebum excretion rate can now be accomplished by the **oral** 13-cis retinoic acid therapy. The correction of the abnormal or excessive keratinization is accomplished by **topical** treatment with comedolytic agents such as transretinoic acid and salicylic acid which are effective in reducing the number of comedones. Reduction of the inflammation process can be achieved by the **topical** application of potent antimicrobial agent such as benzoyl peroxide which is extremely effective in reducing the number of the **acne** bacillus, Propionibacterium acnes.

SUMM . . . in U.S. Pat. No. 4,355,028, issued Oct. 19, 1982 to A. Kligman et al. it has been proposed to treat **acne** vulgaris with both salicylic acid and benzoyl peroxide at certain specified levels simultaneously or **sequentially**.

SUMM . . . possessing both comedolytic and antibacterial activity against P. acnes be found to provide for a simplified yet improved treatment of **acne** and particularly **acne** vulgaris.

ACCESSION NUMBER: 85:31566 USPATFULL

TITLE: Monohydroxy-benzoyl peroxide and compositions for treating acne

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NUMBER OF CLAIMS: 5
EXEMPLARY CLAIM: 1,2
LINE COUNT: 235
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

CLM What is claimed is:

1. 2-Hydroxy benzoyl peroxide of the formula ##STR4##

2. A composition for the topical treatment of acne in the form of a lotion, cream, gel or solution containing from about 1 to about 20% by

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SUMM . . . invention relates to the use of the compounds of Formula 1 for the treatment of skin-related diseases, including, without limitation, **actinic** keratoses, arsenic keratoses, inflammatory and non-inflammatory **acne**, psoriasis, ichthyoses and other keratinization and hyperproliferative disorders of the skin, eczema, atopic dermatitis, Darriers disease, lichen planus, prevention and reversal of glucocorticoid damage (steroid atrophy), as a **topical** anti-microbial, as skin anti-pigmentation agents and to treat and reverse the effects of age and photo damage to the skin.. . . and malignant hyperproliferative diseases such as cancers of the breast, skin, prostate, cervix, uterus, colon, bladder, esophagus, stomach, lung, larynx, **oral** cavity, blood and lymphatic system, metaplasias, dysplasias, neoplasias, leukoplakias and papillomas of the mucous membranes and in the treatment of. . .

SUMM . . . of certain diseases or conditions. For this purpose the retinoid antagonist and/or inverse agonist compounds of the invention may be **co-administered** with retinoids. The retinoid antagonist and inverse agonist compounds of the present invention are also useful in the treatment of. . .

SUMM . . . including a human being, to treat or alleviate the conditions which were described above as treatable by retinoids, to be **co -administered** with retinoids to eliminate or reduce side effects of retinoids, or to treat retinoid or Vitamin A overdose or poisoning.

SUMM . . . Such concentrations can be arrived at through routine experimentation. However, it is anticipated that in the treatment of, for example, **acne**, or similar dermatoses, that a formulation containing between 0.01 and 1.0 milligrams per milliliter of formulation will constitute a therapeutically. . .

SUMM . . . inverse agonist compounds of the invention, when used to take advantage of their antagonist and/or inverse agonist property, can be **co-administered** to mammals, including humans, with retinoid agonists and, by means of pharmacological selectivity or site-specific delivery, preferentially prevent the undesired. . .

SUMM . . . vitamin A precursor, or other retinoid) has been discontinued. Alternatively, the antagonist and/or inverse agonist compounds of the invention are **co-administered** with retinoid drugs, in situations where the retinoid provides a therapeutic benefit, and where the **co-administered** antagonist and/or inverse agonist compound alleviates or eliminates one or more undesired side effects of the retinoid. For this type. . . agonist compound may be administered in a site-specific manner, for example as a topically applied cream or lotion while the **co-administered** retinoid may be given enterally. For therapeutic applications the antagonist compounds of the invention, like the retinoid agonists compounds, are. . . and the like, using such pharmaceutically acceptable excipients and vehicles which per se are well known in the art. For **topical** application, the antagonist and/or inverse agonist compounds of the invention could also be administered as a powder or spray, particularly. . . it may be confected as a powder, pill, tablet or the like or as a syrup or elixir suitable for **oral** administration. For intravenous or intraperitoneal administration, the compound will be prepared as a solution or suspension capable of being administered. . .

SUMM . . . dose. A therapeutic concentration will be that concentration